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| 09/995,920      | 11/28/2001  | Bruce Arthur Lueckenhoff | CIS01-17(4404)      | 1152             |

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EXAMINER

DOAN, DUYEN MY

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2143

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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# Office Action Summary

Application No.

09/995,920

Applicant(s)

LUECKENHOFF, BRUCE ARTHUR

Examiner

Duyen M Doan

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on 28 November 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Detail Action***

Claims 1-42 are presented for examination.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 8-11, 12-16, 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Besser et al (us pat 6496867) in view of Naudus et al (us pat 6292839).

**As regarding claim 1**, Besser et al discloses detecting an initial request (col.7, line 62-67, col.8, line 1-20); identifying the initial request as a candidate to be a tunneling request (col.7, line 62-67, col.8, line 1-20); forwarding the tunneling request towards an end tunneling device (col.7, line 62-67, col.8, line 1-20).

Besser et al does not disclose modifying at least one indicator of an initial header in the initial request to convert the initial request into the tunneling request.

Naudus et al discloses disclose modifying at least one indicator of an initial header in the initial request to convert the initial request into the tunneling request (col.4, line 48-67, col.5, line 1-22).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Naudus et al's teachings with the teachings of Besser et al, for the purpose of allowing supplemental services to be added to a network device such a gateway, in less time with less expense (see Naudus et al col.2, line 39-48).

**As regarding claim 2**, Besser et al-Naudus et al discloses detecting that a destination address in the initial request is for a destination device associated with an end tunneling device (see Besser et al col.7, line 62-67, col.8, line 1-20).

**As regarding claim 3**, Besser et al-Naudus et al discloses setting the protocol indicator in the initial header to a value indicating that the initial request is a tunneling request (see Naudus et al col.4, line 48-67, col.5, line 1-22). The same motivation were utilized in claim 1, are applied equally as well to claim 3.

**As regarding claim 4**, Besser et al-Naudus et al discloses replacing a destination address of a destination device in the initial header with an end tunneling address of an end tunneling device to produce a tunneling header (see Naudus et al col.5, line 1-67). The same motivation were utilized in claim 1, are applied equally as well to claim 4.

**As regarding claim 5**, Besser et al discloses specifying a destination code within the tunneling header for at least one of a plurality of destination addresses of destination devices served by the end tunneling device (col.12, line 45-67), Naudus also discloses similar aspect of the claim invention (see Naudus col.6, line 10-67).

**As regarding claim 6**, Besser et al-Naudus et al discloses the initial request received by the beginning tunneling device is in the format of a TCP/IP protocol (see Besser et al col.6, line 7-34) and wherein the step of specifying comprises the steps of: generating a destination code to designate a destination address served by the end tunneling device and storing the destination code in a fragment offset field of an IP header of the tunneling request (see Besser et al col.7, line 7-26).

**As regarding claim 8**, is rejected for the same rationale as claims 3,4,7 above because claim 8 is the combination of claim 3,4,7.

**As regarding claim 9**, Naudus et al discloses the initial request and the tunneling request are the same size (col.5, line 8-22 (Naudus et al did not expressly teach the size of initial request and tunneling request are the same size but he teach instead of adding another IP header to the original packet, hidden virtual tunnel created by modifying headers in the original data packets)). The same motivation were utilized in claim 1, are applied equally as well to claim 9.

**As regarding claim 10**, Naudus et al discloses the initial and tunneling request include respective initial and tunneling headers of the same size (col.5, line 8-22 (Naudus et al did not expressly teach the size of initial request and tunneling request are the same size but he teach instead of adding another IP header to the original packet, hidden virtual tunnel created by modifying headers in the original data packets)). The same motivation were utilized in claim 1, are applied equally as well to claim 10.

**As regarding claim 11**, Naudus et al discloses the initial request is a full initial request and wherein the full initial request can be fully converted into a single tunneling

Art Unit: 2143

request (col.5, line 8-22). The same motivation were utilized in claim 1, are applied equally as well to claim 11.

**As regarding claim 12**, Besser et al discloses detecting a tunneling request (col.7, line 62-67, col.8, line 1-20); identifying the tunneling request as a candidate to be an initial request (col.7, line 62-67, col.8, line 1-20); forwarding the initial request towards a destination device (col.7, line 62-67, col.8, line 1-20).

Besser et al does not disclose modifying the at least one indicator of a tunneling header in the tunneling request to convert the tunneling request into the initial request.

Naudus et al disclose modifying the at least one indicator of a tunneling header in the tunneling request to convert the tunneling request into the initial request (col.4, line 49-67 (Naudus et al does not expressly teach convert the tunneling request into the initial request, he does teach modifying one or more header of the initial request to tunneling request. Besser et al on the other hand teach when the end tunnel device receive the packet from the beginning tunnel device, end tunnel device decrypt packet, the packet now contains destination IP address and content data in manner similar to the original packet, system then forwards packet to client. If using Naudus et al's method of modifying one or more header to create hidden virtual tunnel, instead of Besser et al's method of encapsulating IP packet in another IP header for tunneling packet, it is obvious that at the end of tunneling device, the IP header have to be modified back to the original address, so that end tunneling device can forward that packet to the client C.)).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Naudus et al's teachings with the teachings of Besser et al, for the purpose of allowing supplemental services to be added to a network device such a gateway, in less time with less expense (see Naudus et al col.2, line 39-48). By modifying the tunnel request back to the initial request able the end-tunneling device to forward the packet to end-user.

**As regarding claim 13**, Besser et al-Naudus et al discloses setting a protocol indicator obtained from the tunneling header to a value to convert the tunneling request to an initial request (see Naudus et al col.4, line 48-67, col.5, line 1-22). The same motivation and rationale were utilized in claim 12, are applied equally as well to claim 13.

**As regarding claim 14**, Besser et al-Naudus et al discloses replacing an end tunneling address of the end tunneling device in the tunneling header with a destination address to produce an initial header (see Naudus et al col.5, line 1-67). The same motivation and rationale were utilized in claim 12, are applied equally as well to claim 14.

**As regarding claim 15**, Besser et al-Naudus et al discloses obtaining a destination code within the tunneling header for at least one of a plurality of destination addresses of destination devices served by the end tunneling device; and wherein the destination address used in the step of replacing is determined by the destination code (col.12, line 45-67), Naudus also discloses similar aspect of the claim invention (see

Art Unit: 2143

Naudus col.6, line 10-67). The same motivation and rationale were utilized in claim 12, are applied equally as well to claim 15.

**As regarding claim 16**, Besser et al-Naudus et al discloses the tunneling request received by the end tunneling device is in the format of a TCP/IP protocol (see Besser et al col.6, line 7-34) and wherein the step of obtaining comprises the steps of: reading a destination code from a fragment offset field of an IP header of the tunneling request; and from the destination code, ascertaining the destination address served by the end tunneling device (see Besser et al col.7, line 7-26). The same motivation and rationale were utilized in claim 12, are applied equally as well to claim 16.

**As regarding claim 18**, is rejected for the same rationale as claims 13, 14, 17.

**As regarding claim 19**, is rejected for the same rationale as claim 1.

**As regarding claim 20**, is rejected for the same rationale as claim 9.

**As regarding claims 21-31** are rejected for the same rationale as claims 1-11.

**As regarding claims 12-18**, are rejected for the same rationale as claims 32-38.

**As regarding claims 39-40** are rejected for the same rationale as claims 19-20.

**As regarding claims 41-42** are rejected for the same rationale as claim 1.

Claims 7,17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Besser et al (us pat 6496867) and Naudus et al (us pat 6292839) as applied to claims 1, 12 above, and further in view of Provino (us pat 6557037).

**As regarding claim 7**, Besser et al and Naudus et al disclose all the limitation of claim 1 above, the combination of Besser et al and Naudus et al does not disclose



Art Unit: 2143

setting an error correction code in the tunneling header to reflect modifications made to convert the initial header to the tunneling header.

Provino discloses setting an error correction code in the tunneling header to reflect modifications made to convert the initial header to the tunneling header (col.3, line 64-67, col.4, line 1-20).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Provino's teachings with the teachings of Besser et al and Naudus et al, for the purpose of verify that the message packet was correctly transferred from the source to the destination device (incase of error detection information) and correct selected types of errors if the message packet was not correctly transferred (in the case of error correction information) (see Provino col.4, line 12-20).

**As regarding claim 17 is rejected for the same rationale as claim 7.**

Art Unit: 2143

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duyen M Doan whose telephone number is (571) 272-4226. The examiner can normally be reached on 9:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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